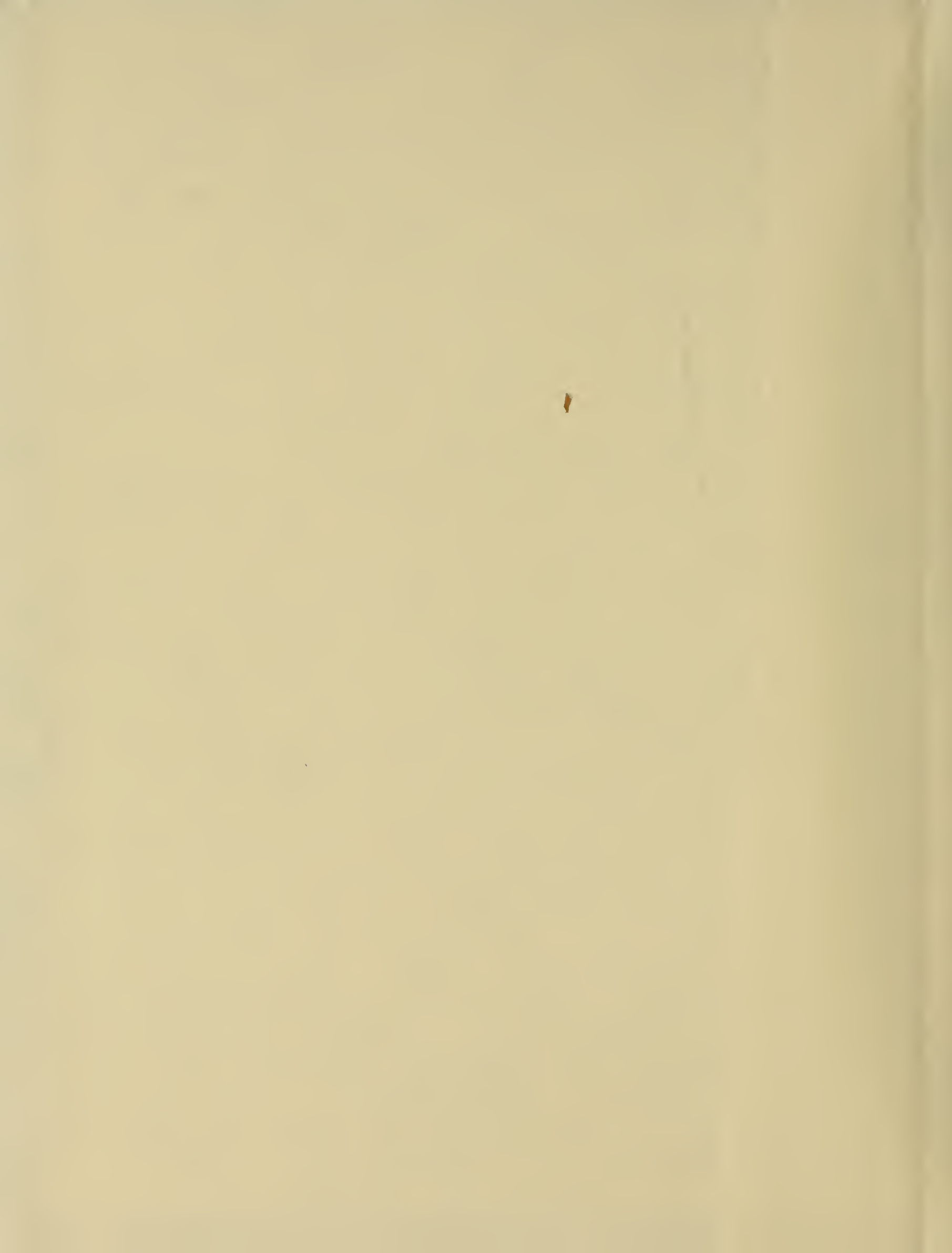


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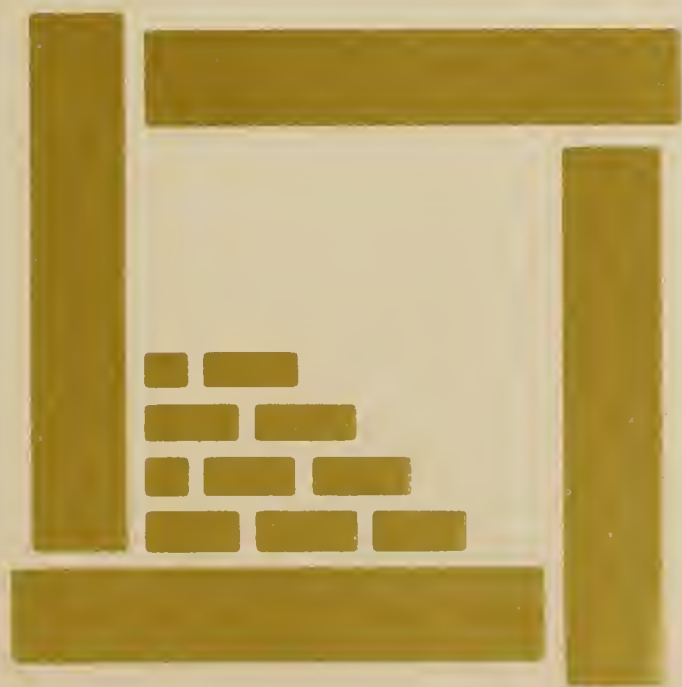
Census of Construction Industries

CC82-I-22

INDUSTRY SERIES

Glass and Glazing Work Special Trade Contractors

Industry 1793



The publications
from the 1982 Economic and
Agriculture Censuses are dedicated
to the memory of Shirley Kallek,
Associate Director for Economic Fields.
During her career at the Bureau of the
Census (1955 to 1983), she continually
directed efforts to improve
the timeliness and accuracy of
economic statistics.



FINAL REPORT
INDUSTRY SERIES

1982 Census of Construction Industries

CC82-I-1 to 28
Changed October 1986

CHANGE SHEET

This revision is to table 4 in the original publications for Industry Series CC82-I-1 to 27 and table 8 for Industry Series CC82-I-28. In the stub, change 1982 (line 8) to read 1981 and 1981 (line 12) to read 1982.



U.S. Department
of Commerce
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THE CENSUS

Census
HD
9715
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U52x
1984
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no. 22

1982 Census of Construction Industries

c. 3

CC82-1-22

INDUSTRY SERIES

Glass and Glazing Work Special Trade Contractors

Industry 1793

Issued September 1984



U.S. Department of Commerce
Malcolm Baldrige, Secretary
Clarence J. Brown, Deputy Secretary
Sidney Jones, Under Secretary for
Economic Affairs

BUREAU OF THE CENSUS
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This report was prepared in the Construction Statistics Division under the general direction of Leonora M. Gross, Chief. Alan I. Blum, Assistant Division Chief for Industry Surveys, was responsible for the overall management of the census of construction industries. He guided the planning and implementation of the project and coordinated activities with other divisions.

A. William Visnansky supervised the preparation of this report. Barbara J. Hadden, Edward R. Glover, Otto G. Ricci, Marie Rustin-Sanhueza, and Shirley M. Baker made important contributions in such areas as developing specifications, procedures, and resolving problems.

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ECONOMIC CENSUSES OVER TIME

The early beginnings of America's industrial output were first measured in the United States in the 1810 Decennial Census and again in 1820, when questions on manufacturing were included with those for population. Beginning with the 1840 Decennial Census, there were enumerations of manufactures and mineral industries at 10-year intervals up to and including the year 1900 for manufactures and 1940 for mineral industries. The latter census was taken again for 1954, 1958, 1963, and 1967.

Because of the increasing dominance of manufacturing in the early 20th century, Congress directed that quinquennial censuses of manufactures be taken beginning in 1905. However, from 1919 through 1939, these censuses were conducted every 2 years. The need for war-related current surveys in the early 1940's postponed the next census of manufactures until 1948 (for 1947). That census was again taken for 1954, 1958, 1963, and 1967.

Retail and wholesale trade data were first collected in 1930, and in 1933 information on selected service industries was added to the data-collection operation. These business censuses, as they were called, were again taken for 1935, 1939 (as part of the 1940 decennial program), 1948, 1954, 1958, 1963, and 1967.

Information on construction industries was first obtained in 1930 and again for 1935 and 1939. Data for the full spectrum of construction industries were not gathered again until 1968 (for 1967).

The need for transportation data to supplement information available from existing governmental or private sources was recognized by Congress in the late 1950's and early 1960's. The census of transportation (consisting of several surveys) was first taken for 1963 and again for 1967.

Since 1967, all of the above censuses have been taken quinquennially as part of the Census Bureau's economic census program. (For the 1977 censuses, the coverage of the service

industries was broadened from "selected services" to all services, except religious organizations and private households. A total of 41 additional four-digit standard industrial classifications¹ (SIC's) in 7 SIC major groups was added to the scope of the census. While most of the industries included for the first time for 1977 were covered again for 1982, some were not, i.e., hospitals; elementary and secondary schools; colleges, universities, and professional schools; junior colleges and technical institutes; labor unions and similar labor organizations; and political organizations.)

The first manufacturing census for an outlying area was conducted in Puerto Rico for the year 1909. Thereafter, with the exception of 1929, a census was taken at 10-year intervals through 1949. The first censuses of retail trade, wholesale trade, and selected service industries in Puerto Rico were conducted for 1939. These censuses also were taken for the years 1949, 1954, 1958, 1963, and 1967. A census of construction industries was first introduced in Puerto Rico for 1967. These censuses of Puerto Rico have been taken since then for the years 1972, 1977, and 1982.

Censuses of manufactures, retail trade, wholesale trade, and selected service industries were conducted in Guam and the Virgin Islands of the United States for 1958, 1963, 1967, 1972, 1977, and 1982. Censuses of mineral industries were taken in the Virgin Islands of the United States for the years 1958, 1963, and 1967 but not since that time. A census of construction industries was also undertaken in these areas for 1972, 1977, and 1982.

Retail trade, wholesale trade, selected service industries, manufacturing, and construction industries were canvassed for the first time in the Northern Mariana Islands in 1983 (for 1982).

For 1982, the economic censuses and agriculture censuses were conducted concurrently.

USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source for facts about the structure and functioning of the Nation's economy and provide essential information for government, business, industry, and the general public. They provide an important part of the framework for such composite measures as the gross national product, input-output measures, indexes of industrial production, and indexes measuring productivity and price levels. Information from the censuses is used to establish sampling frames and as benchmarks for current surveys of business activity, which are essential for measuring short-term economic conditions.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No.041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

State and local governments use census data to assess business activities within their jurisdictions. The private sector uses the data to forecast general economic conditions; analyze sales performance; lay out sales territories; allocate funds for advertising; decide on locations for new plants, warehouses, or stores; and measure potential markets in terms of size, geographic areas, kinds of business, and kinds of products made or sold.

Following every census, thousands of businesses and other users purchase reports. Likewise, census facts are widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. All 1982 data are available on microfiche from the U.S. Government Printing Office and most data on computer tape from the Census Bureau. Finally, the more than 50 State Data Centers also are suppliers of economic census statistics.

AUTHORITY AND SCOPE OF THE ECONOMIC CENSUSES

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which directs that they be taken at 5-year intervals for the years ending in 2 and 7. The 1982 Economic Censuses covered manufacturing, mining, construction industries, retail trade, wholesale trade, service industries, and selected transportation activities. Special programs also cover minority-owned and women-owned businesses. The next economic censuses are scheduled to be taken in 1988 for the year 1987.

METHOD OF ACCOUNTING AND TIME COVERED

For the census report, respondents could use any system of accounting by which they maintained their books. Therefore, reports could be based on cash, accrual, or completion of contract methods of accounting.

A report was supposed to cover the calendar year 1982. If that involved considerable costs, fiscal year reporting was permitted if it did not produce great differences. However, all payroll and employment figures had to be reported for the calendar year.

CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION

The 1982 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots as defined in the 1972 Standard Industrial Classification (SIC) Manual.¹ This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

Contract construction—The SIC manual defines construction in three broad types of activity: (1) building construction by general contractors, (2) other construction by general contractors, and (3) construction by special trade contractors.

1. **Building construction by general contractors**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other projects of a similar character.
2. **Other construction by general contractors**—Often referred to as heavy construction contractors, these contractors are primarily engaged in the construction of highways, streets, bridges, and tunnels; docks and piers; dams and water projects; sewage collection, treatment, and disposal facilities; storm sewer systems; air fields; and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings.
3. **Construction by special trade contractors**—Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work, carpentry, etc.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

Construction on their own account, for sale—Operative builders are primarily engaged in constructing buildings or other structures on their own account, acting as their own general contractor. These structures are generally sold when completed. Investment builders, primarily engaged in construction on their own account for rent or lease, were not included within the scope of the construction census.

Subdividers and developers, except cemeteries—The SIC manual defines subdividers and developers, except cemeteries, as establishments engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.

In this system, each establishment is assigned an industry code on the basis of its major activity.

Each establishment receiving a questionnaire was requested to report the percent of total business receipts for each kind-of-business activity engaged in during 1982. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction receipts to total business receipts was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities, but in only a few instances do the SIC industry categories take into consideration combinations of activities. An example is SIC 1711, which includes establishments primarily engaged in plumbing, heating, air conditioning, ventilation, and refrigeration work. It is necessary, however, to assign a single industry code to the establishment based on its major activity.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities.

The structure of the Standard Industrial Classification System makes it possible to classify or tabulate establishments by major group (two-digit), industry group (three-digit), or industry (four-digit) according to the degree of detail available and needed.

ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business which has been established for the management of more than a single project or job and is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to, estimating, bidding, scheduling, purchasing, supervising, and operating the actual construction work being conducted at one or more construction sites.

Exceptions to the "relatively permanent office" rule were that: (1) in case of joint ventures, a separate establishment report was required covering the joint venture entity even though established to undertake only a single project; and (2) to the extent that separate legal entities were set up to carry out only a given project or part of a project, then a separate establishment report was also required for each legal entity.

To the extent that several companies shared or operated out of a single office or place of business, each such legal entity engaged in construction was considered a separate establishment and each was requested to file the necessary "establishment" report covering the activities it conducted in or from that common office.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1982.

Separate construction reports were not required for each project or construction site. Aggregated information was included in the report of the construction establishment responsible for the work of the construction projects and sites.

If an establishment engaged in two or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, construction, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1982 gross receipts from construction activities exceeded the gross receipts from each of its other activities.

An establishment is not necessarily identical with a "company" or "enterprise," which may consist of one or more establishments. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

Construction businesses with no payroll during 1982 (nonemployers) were not required to file census reports. Collection and tabulation of data for these businesses are described in the section on "Sample Design." Foreign construction activities were not included in this census.

SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES

The firms included in the 1982 Census of Construction Industries were identified as part of an operation common to all 1982 Economic Censuses. Construction firms were divided into employers (firms with payroll) and nonemployers (firms without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government based on information supplied directly to the agencies.

Employer Firms

Developing the sampling frame for employer firms—This operation started with obtaining a list of all construction firms in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of firms engaged in business activities in the United States. The file contains the name, address, and form of ownership of each firm and also indicates whether or not the firm is subject to the Federal Insurance Contributions Act. Each firm in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each firm. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative-record data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer firms. However, for the 1982 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those firms which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment firms and large single-establishment firms. Thus, the 1982 Economic Census list for single-establishment employer firms was obtained from the IRS-SSA, but the list of establishments of multi-establishment employer companies was obtained directly from those companies in the COS.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a firm to the proper economic census, but there were a number of firms for which this information was inadequate or unavailable. A special form, NC-9923, General Report, was mailed to all such firms, requesting information on the nature of the firm's activities. From the information reported, the firm was given an industrial classification code and assigned to the appropriate economic census. Since construction firms found in this way were identified as such, only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

For 1982, some data will be published for Standard Consolidated Statistical Areas (SCSA's) and selected Standard Metropolitan Statistical Areas (SMSA's). Therefore, each establishment was assigned to an SMSA code or to the balance of a State. The balance of the State was considered to be a separate cell for the selection process. In States where none of the SMSA's had more than 500,000 inhabitants in the 1970 Decennial Census, all establishments were assigned to the balance of the State.

Selecting the employer sample—A construction universe of about 464,000 single establishment employer firms and 6,500 multiestablishment employers, accounting for another 13,000 construction establishments, was developed by the procedures described above. From this universe, a sample of 172,000 employer establishments was selected. This sample was generally organized by standard industrial classification (SIC) in State sequence. The sample was designed to provide publishable estimates for the most construction industries at the State and selected SMSA level. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with the payroll equivalent of 20 employees or more, and a sample of single-establishment companies with less than 20 employees. There were three SIC's for which this standard plan was not used: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

The number of establishments classified in each of these three industries is very small and consequently, all single-unit establishments in these three industries were included in the sample. For sampling purposes, the number of employees was estimated from the 1981 payroll data in the administrative records, using an industry average wage per employee. The sampling was accomplished using a systematic method within each four-digit SIC. If the SIC code for an establishment was not complete, it was sampled as part of a two-digit group (e.g., 1520 was sampled as 1500, 1620 as part of 1600) except for non-classifiable cases in two-digit group 17. These were sampled as part of 1799 which is Special Trade Contractors, Not Elsewhere Classified. For the establishments with less than 20 employees, the sample was selected by sorting the establishments into State by SMSA by SIC by payroll sequences, and drawing a systematic sample of at least two establishments within each cell, with the probability of selection being proportional to the 1981 payroll. If the State-SMSA-SIC cell had two or less establishments in the frame, all establishments were selected (a 100-percent sample). A 100-percent sample was taken of the construction firms identified from the NC-9923, General Report, and of the transfers from other census trade areas. These latter cases were identified during the processing stages. These were caused either by changes of activity in the firm since the last updating of the classification file, or errors in the mailout classification. These cases were all added to the construction census, with certainty.

Estimation procedures for 1982 and 1977 data—Since all larger employer firms and some smaller ones were included in the census, sample estimation was required only for the universe of firms not selected with certainty. The published statistics are the totals of the estimates for the sampled firms and the

aggregates for the certainty (larger) firms. All estimates for 1982 and 1977 published here are simple unbiased estimates of the form:

$$x'_c = \frac{\sum_{i=1}^{n_c} x_i}{n_c}$$

where: x'_c is the simple unbiased estimate of a characteristic for a publication cell.

x_i is the reported value of a characteristic for an individual establishment in the publication cell.

p_i is the selection probability of that firm.

n_c is the number of firms in the sample for the cell.

This method of estimation was used for all 1982 and 1977 characteristics. Before this formula was applied, it was necessary to convert into dollars those distributions of construction receipts which had been reported by the establishments as percentages—construction receipts by type of project, location of project, etc.

Reliability of employer statistics—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimates directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Although relative standard errors have been calculated for all of the published statistics, they are shown for each statistic only in the tables presenting detailed statistics. The other tables show relative standard errors only for some characteristics because of lack of space.

Separate measures of reporting and processing errors are not available. However, estimates which were subject to large errors of these types are likely to have been detected and corrected, or withheld from publication in the process of the review of the data for reasonableness and consistency. Other specific qualifications of the published data are indicated in footnotes to the tables.

The statistics in this report were based on data received by the time of final publication. Data were imputed for

establishments that did not report by that date. Selected establishments were contacted again to obtain as much information on the telephone as possible. Late data received in early 1984 were substituted for imputed data when the difference between the two was significant. Some publication cells in which more than 50 percent of the data were imputed have been suppressed.

Nonemployer Firms

General—As described earlier, the information derived from the business income tax returns of all firms was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with firms without payroll were treated as nonemployers. The nonemployer construction firms were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts" was based on receipts information reported on the tax return. In 1982, this group accounted for 60 percent of the total number of construction establishments, but accounted for only 8 percent of all business receipts of all construction establishments.

Qualifications to the nonemployer data—Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.

CENSUS REPORT FORMS

Information for the 1982 Census of Construction Industries was obtained from employer establishments primarily through the use of eight questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the three two-digit SIC groups (15, 16, and 17), and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted most of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were solicited from construction trade associations and appropriate advisory groups. The Census Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

DATA PROCESSING

The 1982 census report forms were mailed out in December 1982. Collection of these report forms, also by mail, was essentially completed in July 1983. They were mailed from and

returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters in Washington, D.C.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding) and imputation for missing items or for the small number of reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

GEOGRAPHIC CLASSIFICATION

Information for the 1982 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. Separate State codes were assigned based on this information.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected SCSA's and SMSA's.

DUPLICATION IN RECEIPTS

The aggregate of construction receipts reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work (and the receipts) of one firm may be subcontracted to other construction firms and also be included in the subcontractors' receipts. To avoid this duplication, a "net construction receipts" figure has been derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts.

Duplication in receipts between other construction and non-construction industries results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is

defined in the 1982 Census of Construction Industries as equal to all business receipts less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, value added is defined as equal to all business receipts less land receipts, payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1982 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies), as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, D.C., 20233.

To discuss a special tabulation before submitting specifications, call 301-763-5435.

RELATIONSHIPS OF THE ECONOMIC CENSUSES TO CURRENT SURVEYS

The Census Bureau also conducts current surveys (monthly, quarterly, and annually) to keep abreast of the rapid changes in business conditions, new processes, new materials, and shifting demands of goods and services. The census universe provides the sampling frame, weights, and benchmarks on which some of these current surveys are based. The accuracy of the measures derived from these current surveys is directly related to the completeness of information provided in the censuses.

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1982 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas, the construction census figures cover both new construction and

maintenance and repair work, but only for establishments classified in the construction industry. Force account construction activity—construction work performed by the labor force of a nonconstruction company for itself, or by other entities (Federal, State, or local governments) for themselves, or by property owners for themselves—probably accounts for more than half of the difference in the data of the two series of reports. Other factors contributing to the difference are that the census data do not include: (1) the value of materials supplied by the owners of projects, (2) the value of separate architectural and engineering services and, to a lesser extent, (3) the value of construction work performed for others by firms outside the scope of construction (manufacturers who install, lumber yards and other businesses, etc.).

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology. Their effect is not fully known.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

- * Sampling error exceeds 40 percent.
- ** All employees (average) is the sum of construction workers during pay period including 12th of March, May, August, and November divided by 4, added to all others, March 12th.
- Represents zero.
- † Represents total construction receipts less payments for construction work subcontracted to others. (See Duplication in Receipts.)
- †† Represents all business receipts less payments for construction work subcontracted to others, and payments for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from "all business receipts." (See Duplication in Receipts.)
- ‡ Possible duplication in data. (See Duplication in Receipts.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated standard error, or a consistency review.
- (W) Greater than zero but less than 1 percent.
- n.s.k. Not specified by kind.

Users' Guide for Locating Statistics in This Report by Table Number

Statistics	For U.S.	By State	By employ- ment size	By receipts size	By type, class, ownership, kind of business, and location of construction ¹	By speciali- zation in types of construction
Assets and depreciation (gross book value):						
Beginning of year—structures, machinery and equipment	3					
End of year—total	1, 3	1	5	6		
End of year—structures, machinery and equipment	3					
Depreciation charges during the year— structures, machinery and equipment	3					
Capital expenditures:						
Total capital expenditures	1, 3	1	5	6		
New structures—machinery and equipment	3					
Used structures—machinery and equipment	3					
Communication services, payments for	2					
Employees:						
All employees—average number	1, 2	1	5	6		8
Construction workers—average number	1, 2, 9					
Other employees—March	2					
Employer costs for fringe benefits—legally required and voluntary expenditures	2					
Establishments:						
Number in business at end of year	2					
Number in business during the year	1, 2, 4, 9	1, 9	5	6		8
Hours—construction workers:						
Total	1, 2, 9	1, 9	5	6		
Quarterly	2, 9	9				
Inventories	4					
Materials, components, supplies, and fuels— payments for	1, 2	1	5	6		
Payroll:						
First quarter, all employees	2					
Annual:						
All employees	1, 2	1	5	6		8
Construction workers	1, 2	1				
Other employees	2					
Power, fuels, and lubricants—payments for	2					
Profile of the industry—selected industry averages	12					
Proprietors and working partners	2					
Ratios, State	13	13				
Receipts:						
All business receipts	2		5	6	11	
Construction receipts, total	1, 2, 4	1	5	6	2, 7, 10	8
For work subcontracted in from others	2					
Other business receipts and land receipts ²	2					
Net construction receipts	1, 2	1	5	6		8
Value added	1, 2	1	5	6		8
Rental payments:						
Total	1, 2	1	5	6		
For machinery and equipment	2					
For structures	2					
Repairs to structures and related facilities	2					
Repairs to machinery and equipment	2					
Storage capacity for fuels ³	2					
Subcontract work to others, payments for	1, 2	1	5	6		8

Note: Data for 1977 and earlier years are also available in some of these tables.

¹Type—buildings, roads, etc. Class—new construction or maintenance and repair work. Ownership—private or government owned.

²Other business receipts and land receipts are shown separately for SIC's 1531 and 6552 only.

³Storage capacity for fuels shown only for SIC's 1611, 1622, 1623, and 1629.

Glass and Glazing Work Special Trade Contractors

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Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.

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SUMMARY OF FINDINGS

Establishments classified in this industry are primarily engaged in glass and glazing work in connection with, but not limited to, building construction. For specific examples, refer to the 1972 Standard Industrial Classification (SIC) Manual and its 1977 supplement.¹

During 1982, there were 3,797 establishments with payroll classified in this industry.² All business receipts of these establishments amounted to \$2.6 billion, of which \$2.4 billion were receipts for construction work. Their payments for construction work subcontracted to others amounted to \$59.7 million, leaving net construction receipts of about \$2.4 billion. Value added for 1982 was \$1.3 billion. (See Introduction and appendixes for explanation of terms.)

The establishments in this industry made payments of \$1.2 billion for materials, components, and supplies purchased for use in construction work for others, purchased and subsequently provided to subcontractors for their use, purchased and then resold to others, and purchased and used in construction work for their own account. However, materials furnished to contractors by owners of projects are, of course, not included. Payments of \$43.2 million were also made for selected power, fuels, and lubricants purchased during the year from other companies or received from other establishments of the parent company.

¹Standard Industrial Classification Manual: 1972. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 041-001-00066-6. 1977 Supplement. Stock No. 003-005-00176-0.

²Limited data for establishments in this industry without payroll (nonemployers) will be included in the U.S. industry summary report to be published after the individual industry reports have been issued.

Establishments with 10 employees or more, while representing only 26 percent of the total number of employer establishments in this industry, accounted for 76 percent of all business receipts.

Total average employment in the industry showed an increase of 37 percent from 1977 to a total of 35.8 thousand employees. Total payroll for 1982 amounted to \$696.5 million. Hours worked by construction workers during the first quarter of 1982 were 10.2 million hours, while hours worked during the third quarter were 11.2 million hours.

Payments of \$134.2 million for employer costs for fringe benefits (not included in payroll) represent expenditures during the year for legally required and voluntary fringe benefit programs for employees—such as employers' Social Security contributions, unemployment compensation, pension plans, and welfare plans.

The 1982 estimates for establishments with payroll in all of the construction industries are based on a probability sample consisting of about 172,000 construction establishments. The estimates for this particular industry are based on a sample of about 1,800 establishments.

The statistics reported by each establishment cover all of its activities, not just construction. Therefore, aggregates of such data for an industry reflect not only the primary construction activities of the establishments in the industry, but also their secondary construction activities and any nonconstruction activities.

All data shown are based on current dollars for the years specified and have not been adjusted for price changes or inflation between 1977 and 1982.

Table 1. General Statistics for Establishments With Payroll by State: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	1982							
	Number of establishments	Employees**		Payroll		Construction worker hours (thousands)	Total construction receipts	Net construction receipts†
		All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H	
United States	3 797	35 843	26 402	696 463	492 590	43 075	2 422 274	2 362 527
Alabama	66	429	267	7 158	3 663	244	26 103	25 770
Alaska	10	97	66	2 163	1 407	84	6 310	6 310
Arizona	57	445	310	6 689	4 183	609	24 921	24 711
Arkansas	36	145	122	2 045	1 733	234	7 107	(D)
California	574	4 407	3 243	97 463	68 783	5 148	373 732	365 674
Colorado	85	914	693	16 827	12 676	1 033	63 580	62 949
Connecticut	39	306	235	5 035	3 469	347	16 742	16 589
Delaware	*5	(S)	(S)	(S)	(S)	(S)	(S)	(D)
District of Columbia	*7	88	75	1 963	1 419	139	5 844	(D)
Florida	324	2 176	1 554	33 740	22 120	2 679	130 343	128 497
Georgia	76	739	549	12 671	8 180	933	46 330	45 827
Hawaii	22	303	213	6 840	4 574	349	26 159	25 465
Idaho	*15	59	*42	850	618	44	*4 342	(D)
Illinois	151	1 422	1 012	33 211	23 620	1 738	111 693	108 030
Indiana	58	481	345	9 059	6 343	426	27 837	27 423
Iowa	22	509	359	6 890	4 789	408	21 025	(D)
Kansas	34	303	203	6 078	4 010	380	15 329	15 252
Kentucky	34	317	209	5 775	3 569	350	14 880	14 730
Louisiana	68	693	549	13 897	10 766	845	52 234	51 673
Maine	15	48	33	516	327	61	2 781	2 746
Maryland	47	732	525	13 772	9 195	914	48 715	47 464
Massachusetts	75	966	733	18 078	13 607	1 294	75 057	72 415
Michigan	144	1 146	840	21 544	14 480	1 350	75 472	73 174
Minnesota	59	537	370	12 308	8 777	597	43 103	42 590
Mississippi	22	168	116	2 489	1 703	154	7 755	7 679
Missouri	47	677	493	14 389	9 958	802	40 796	39 964
Montana	*15	*54	*38	*708	*545	*57	*2 839	(D)
Nebraska	16	118	72	2 447	1 392	125	9 460	9 402
Nevada	29	366	277	7 586	5 857	474	21 846	21 723
New Hampshire	20	(S)	(S)	(S)	(S)	(S)	(S)	(S)
New Jersey	133	1 272	965	23 612	16 084	1 421	79 188	75 834
New Mexico	21	108	74	1 755	1 099	114	5 450	5 395
New York	277	2 332	1 797	37 524	28 163	2 627	135 458	129 596
North Carolina	78	1 018	658	14 479	9 501	1 294	47 697	47 165
North Dakota	8	82	58	1 510	993	105	6 475	(D)
Ohio	147	1 081	779	21 715	15 128	1 274	72 334	70 175
Oklahoma	44	420	343	8 161	5 854	496	28 009	27 870
Oregon	44	310	217	7 327	4 770	355	34 899	34 767
Pennsylvania	144	2 274	1 885	53 385	45 059	3 110	147 645	(D)
Rhode Island	*11	123	79	1 644	1 082	115	9 160	8 931
South Carolina	41	382	249	6 003	3 820	470	21 461	20 665
South Dakota	14	110	68	2 027	1 166	112	6 503	6 503
Tennessee	61	729	440	12 317	7 510	722	41 229	40 589
Texas	336	4 530	3 581	96 548	71 088	6 371	343 831	338 620
Utah	24	104	82	1 865	1 500	126	4 588	4 554
Vermont	9	47	32	676	*362	*55	2 396	(D)
Virginia	49	663	458	11 260	6 592	687	36 967	36 216
Washington	102	665	443	13 200	8 972	684	44 127	43 915
West Virginia	*19	110	83	1 263	909	*121	3 770	3 770
Wisconsin	38	548	349	13 025	7 886	539	35 095	34 483
Wyoming	15	(S)	(S)	(S)	(S)	(S)	(S)	(S)

1982—Con.						1977			Relative standard error of estimate (percent) for column—			Location of establishment
Value added††	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Rental payments for machinery, equipment, and structures	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
1 297 853	1 252 744	59 747	28 823	28 084	228 891	28 125	1 006 566	570 736	1	1	2	U.S.
14 589	(D)	333	272	322	5 867	346	11 508	6 991	16	14	39	Ala.
4 478	3 479	—	211	98	809	50	3 131	2 228	13	6	21	Alaska
11 921	14 266	210	392	249	2 591	477	16 069	9 647	11	12	14	Ariz.
3 415	3 899	(D)	58	(D)	358	259	7 711	4 268	29	—	—	Ark.
202 025	183 528	8 058	6 109	3 640	32 920	3 052	153 463	83 013	4	3	5	Calif.
34 011	34 136	*631	677	747	4 584	415	14 575	9 842	9	6	9	Colo.
8 390	9 669	153	313	375	2 377	261	9 447	5 697	16	13	12	Conn.
(S)	(D)	(D)	(D)	(S)	(S)	47	1 394	759	—	—	—	Del.
3 799	2 026	(D)	30	10	439	151	7 336	4 369	25	—	(W)	D.C.
64 115	70 812	1 846	1 188	1 455	13 809	1 302	46 253	23 453	7	6	9	Fla.
25 507	24 300	503	647	1 222	5 931	603	19 934	10 761	11	10	14	Ga.
13 649	13 142	694	366	168	1 647	125	6 131	3 058	8	5	(W)	Hawaii
*1 903	2 623	(D)	23	*305	484	58	2 948	1 403	40	—	55	Idaho
57 410	56 947	3 663	1 346	1 094	10 147	1 434	57 215	36 372	5	4	12	Ill.
15 243	13 384	414	349	256	3 471	518	19 211	10 529	8	4	3	Ind.
12 224	11 629	(D)	45	164	2 992	273	13 323	7 463	7	—	33	Iowa
10 300	7 913	77	117	137	2 034	223	6 736	4 739	15	13	21	Kans.
8 777	9 488	150	117	228	1 538	287	12 970	5 571	11	11	15	Ky.
27 270	29 767	*561	490	436	3 153	493	16 548	10 438	9	8	9	La.
1 424	1 385	35	19	177	327	101	3 123	(D)	32	28	25	Maine
26 626	24 215	1 251	455	477	4 106	393	13 706	7 504	7	5	2	Md.
39 322	35 765	2 642	924	2 310	7 879	612	26 104	14 070	7	5	3	Mass.
40 082	39 015	2 298	991	688	7 348	989	39 821	23 620	8	5	20	Mich.
22 237	24 065	512	527	376	3 393	243	13 370	6 197	9	5	15	Minn.
4 671	6 331	*76	183	5	759	169	5 568	3 660	17	13	(W)	Miss.
22 792	20 028	831	432	378	2 782	340	12 343	8 647	12	4	1	Mo.
*1 334	*1 737	(D)	(D)	*9	*477	100	3 792	2 192	53	—	49	Mont.
4 853	5 646	58	81	129	1 103	142	6 428	3 955	19	14	8	Nebr.
12 798	11 152	*123	573	155	2 544	269	13 872	6 552	11	8	(W)	Nev.
(S)	(S)	(S)	(D)	(D)	(S)	(S)	(S)	(S)	—	—	—	N.H.
40 613	37 334	3 354	490	1 729	8 631	927	35 892	19 230	7	6	13	N.J.
2 768	3 398	55	87	*27	555	141	4 812	2 642	24	19	41	N. Mex.
69 749	66 880	5 862	1 671	1 886	15 895	1 894	70 129	38 641	7	6	11	N.Y.
26 799	29 799	532	770	812	5 223	673	21 375	13 776	9	11	17	N.C.
3 231	3 298	(D)	140	*92	583	(D)	(D)	(D)	13	—	41	N. Dak.
39 253	34 923	2 159	941	444	5 711	1 066	44 465	23 686	7	6	8	Ohio
14 798	14 365	139	469	207	2 859	256	9 899	4 962	17	12	9	Okla.
17 808	20 014	*132	427	131	1 910	260	13 475	7 542	14	6	23	Oreg.
102 287	36 287	(D)	1 065	1 803	13 467	1 078	39 453	21 816	3	—	14	Pa.
4 413	4 556	229	—	*19	571	144	4 060	2 321	14	10	47	R.I.
10 617	14 619	*796	103	252	1 583	298	8 470	5 737	14	11	26	S.C.
3 258	4 481	—	80	*56	866	70	(D)	(D)	19	14	52	S. Dak.
21 011	30 133	640	414	309	3 090	780	22 809	16 685	10	10	11	Tenn.
170 263	198 101	5 211	3 468	3 339	24 165	3 148	97 598	54 110	3	2	6	Tex.
2 782	2 751	34	118	162	526	101	3 140	1 693	24	22	30	Utah
1 259	2 404	(D)	103	24	416	15	443	233	36	—	(W)	Vt.
16 760	22 930	751	526	386	4 539	496	17 474	11 426	6	5	4	Va.
25 220	22 313	212	501	247	4 793	453	20 843	10 616	9	8	8	Wash.
2 183	1 743	—	45	—	490	77	2 494	1 712	37	38	—	W. Va.
20 281	19 203	(S)	392	429	4 642	456	19 929	12 077	9	5	3	Wis.
(S)	(S)	(S)	(S)	(S)	(S)	*29	*1 577	*745	—	—	—	Wyo.

Table 2. Detailed Statistics for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
Number of establishments in business during year	3 797	3 283	2 459	1 770	2	3	5	6
Number of establishments in business at end of year	3 729	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Proprietors and working partners	965	1 291	988	1 042	7	6	9	9
All employees**	35 843	26 125	20 023	12 280	2	1	3	2
Construction workers:								
March	25 113	18 056	13 080	8 719	1	1	3	2
May	25 509	18 436	13 507	8 663	2	1	3	2
August	26 737	19 222	14 331	9 329	2	1	3	2
November	27 075	21 113	14 756	9 238	2	1	3	2
Average	26 402	19 335	14 175	9 141	2	1	3	2
Other employees:								
March	9 427	6 484	5 614	3 128	2	1	3	2
Construction worker hours (thousands):								
January to March	10 168	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
April to June	10 498	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
July to September	11 156	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
October to December	11 252	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Total hours worked	43 075	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Payroll, all employees	696 463	316 974	190 447	88 512	1	1	3	1
Payroll, construction workers	492 590	228 741	133 487	63 746	1	1	3	2
Payroll, other employees	203 873	88 233	56 960	24 796	1	1	3	1
First quarter payroll, all employees	161 160	70 733	(NA)	(NA)	1	1	(NA)	(NA)
Employer costs for fringe benefits	134 243	55 440	(NA)	(NA)	1	1	(NA)	(NA)
Legally required expenditures	94 983	31 807	(NA)	(NA)	1	1	(NA)	(NA)
Voluntary expenditures	39 260	23 633	(NA)	(NA)	1	1	(NA)	(NA)
All business receipts	2 610 344	1 152 811	657 352	298 605	1	1	3	2
Total construction receipts	2 422 274	1 006 566	593 658	274 191	1	1	4	2
Receipts for work subcontracted in from others	1 325 051	588 081	292 184	116 878	2	1	3	3
Land receipts ¹	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other business receipts	188 069	146 245	63 694	24 404	2	1	7	3
Net construction receipts†	2 362 527	994 651	584 642	270 311	1	1	3	2
Value added††	1 297 853	570 736	340 775	161 672	1	1	3	2
Selected payments	1 312 491	582 076	316 577	136 926	1	1	4	2
Materials, components, and supplies ²	1 209 558	549 919	307 561	133 038	1	1	4	2
Construction work subcontracted to others	59 747	11 916	9 016	3 896	5	6	15	10
Selected power, fuels, and lubricants	43 185	20 242	(NA)	(NA)	2	2	(NA)	(NA)
Electricity	8 604	3 641	(NA)	(NA)	3	2	(NA)	(NA)
Natural gas	2 848	1 513	(NA)	(NA)	4	2	(NA)	(NA)
Gasoline and diesel fuel (including gasohol)	29 100	13 469	(NA)	(NA)	2	2	(NA)	(NA)
Other, including lubricating oils and greases	2 631	1 620	(NA)	(NA)	5	3	(NA)	(NA)
Storage capacity for fuels ³ (thousand gallons)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Rental payments for machinery, equipment, and structures	28 823	9 621	(NA)	(NA)	2	2	(NA)	(NA)
For machinery and equipment	7 923	1 967	1 172	433	3	4	9	31
For structures	20 900	7 654	(NA)	(NA)	3	2	(NA)	(NA)
Selected purchased services	28 258	16 018	(NA)	(NA)	3	2	(NA)	(NA)
Communication services	17 637	9 168	(NA)	(NA)	3	2	(NA)	(NA)
Repairs to structures and related facilities	2 661	1 447	(NA)	(NA)	4	4	(NA)	(NA)
Repairs to machinery and equipment	7 959	5 403	(NA)	(NA)	3	2	(NA)	(NA)
Ownership of construction projects:								
Total construction receipts	2 422 274	1 006 566	593 658	274 191	1	1	4	2
Government owned	180 631	99 997	118 484	(NA)	10	2	4	(NA)
Privately owned	2 241 643	906 570	475 174	(NA)	1	1	4	(NA)

¹Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

²For 1967 and 1972, includes data for power, fuels, and lubricants.

³Data were collected only for establishments classified as heavy construction contractors.

Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1982 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1982	1977	1972	1967	Relative standard error of estimate (percent)			
					1982	1977	1972	1967
STRUCTURES, MACHINERY, AND EQUIPMENT								
Beginning-of-year gross book value of depreciable assets -----	208 056	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	28 084	16 662	9 508	3 283	4	3	10	8
New -----	21 686	13 714	7 869	2 574	4	4	10	8
Used -----	6 398	2 948	1 639	709	9	6	25	21
Retirements and disposition of depreciable assets -----	7 250	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	228 891	113 813	68 591	(NA)	2	2	7	(NA)
Depreciation charges during year -----	30 186	10 917	7 037	(NA)	3	2	1	(NA)
Structures, Additions, and Related Facilities								
Beginning-of-year gross book value of depreciable assets -----	62 657	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	5 807	3 999	3 942	1 372	8	11	26	18
New structures and related facilities -----	4 525	2 829	2 864	872	7	11	22	14
Used structures and related facilities -----	1 282	1 170	1 078	500	23	11	31	23
Retirements and disposition of depreciable assets -----	972	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	67 491	40 614	25 741	(NA)	4	3	9	(NA)
Depreciation charges during year -----	5 978	2 107	1 487	(NA)	7	5	10	(NA)
Machinery and Equipment								
Beginning-of-year gross book value of depreciable assets -----	145 399	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Capital expenditures, other than land -----	22 277	12 664	5 566	(S)	4	5	23	-
New machinery and equipment, including automobiles and trucks -----	17 161	10 886	5 005	1 702	4	3	7	3
New automobiles and trucks, intended primarily for highway use -----	10 636	8 259	(NA)	(NA)	5	4	(NA)	(NA)
Used machinery and equipment, including automobiles and trucks -----	5 116	1 778	561	(S)	9	7	40	-
Retirements and disposition of depreciable assets -----	6 277	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
End-of-year gross book value of depreciable assets -----	161 399	73 199	42 850	(NA)	3	2	1	(NA)
Depreciation charges during year -----	24 208	8 810	5 550	(NA)	3	2	19	(NA)

Table 4. Value of Inventories for Establishments With Payroll: 1982 and 1981

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number	3 797	2
Total construction receipts	2 422 274	1
Establishments with inventories:		
Number	2 518	4
Total construction receipts	1 796 166	2
Inventories ¹ :		
End of 1982, total	117 531	2
Value for establishments with LIFO reserve	19 697	3
Amount of LIFO reserve	5 564	6
Value for establishments with no LIFO reserve	97 834	3
End of 1981, total	119 065	2
Value for establishments with LIFO reserve	20 864	3
Amount of LIFO reserve	6 332	5
Value for establishments with no LIFO reserve	98 201	2
Establishments with no inventories:		
Number	1 279	4
Total construction receipts	626 108	2

¹Inventories at cost or market prior to any adjustment to correct to LIFO values.

Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	
1982										
Number of establishments	3 797	1 813	1 007	581	314	57	19	4	-	1
All employees**	35 843	3 862	6 532	7 726	9 195	3 809	2 506	2 212	-	(D)
Payroll, all employees	696 463	46 650	103 477	148 760	192 876	89 073	64 625	51 001	-	(D)
Construction worker hours (thousands)	43 075	4 406	7 563	8 923	11 054	4 528	3 582	3 016	-	(D)
All business receipts	2 610 344	224 536	398 194	523 169	710 324	355 230	398 890	(D)	-	(D)
Total construction receipts	2 422 274	215 062	368 179	481 751	647 376	332 186	221 534	156 185	-	(D)
Net construction receipts†	2 362 527	209 285	360 794	472 375	634 911	321 926	363 235	(D)	-	(D)
Value added††	1 297 853	104 866	195 125	258 767	347 018	174 640	118 770	98 664	-	(D)
Payments for materials, components, supplies, and fuels	1 252 744	113 893	195 683	255 026	350 840	170 329	120 263	46 708	-	(D)
Payments for construction work subcontracted to others	59 747	5 776	7 385	9 376	12 465	10 260	14 484	(D)	-	(D)
Rental payments for machinery, equipment, and structures	28 823	2 273	5 165	7 370	6 813	3 864	2 472	865	-	(D)
Capital expenditures, other than land	28 084	3 305	5 649	6 581	6 334	4 516	1 698	(D)	-	(D)
End-of-year gross book value of depreciable assets	228 891	29 024	46 575	50 945	54 844	28 021	12 686	6 794	-	(D)
1977										
All employees**	26 125	3 593	5 698	6 690	5 834	2 108	2 202	(D)	(D)	-
Total construction receipts	1 006 566	149 205	214 382	267 034	231 642	85 627	58 677	(D)	(D)	-
Value added††	570 736	76 596	115 466	153 664	135 867	53 782	35 361	(D)	(D)	-
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees**	2	4	5	4	2	(W)	(W)	(W)	-	-
Net construction receipts†	1	5	5	3	1	(W)	(W)	-	-	-
Capital expenditures, other than land	4	14	13	7	4	(W)	(W)	-	-	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

Table 6. Selected Statistics for Establishments With Payroll by Receipts Size Class: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with all business receipts of—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
1982											
Number of establishments -----	3 797	(S)	256	368	991	789	550	387	122	35	26
All employees** -----	35 843	(S)	359	760	3 320	5 250	6 049	8 009	4 758	2 786	4 270
Payroll, all employees -----	696 463	(S)	2 806	6 924	40 440	79 111	107 407	168 652	110 966	64 882	114 410
Construction worker hours (thousands) -----	43 075	(S)	347	790	3 773	6 111	6 791	9 686	5 522	3 684	6 123
All business receipts -----	2 610 344	(S)	10 041	27 974	161 960	283 896	380 952	601 239	424 190	249 024	467 759
Total construction receipts -----	2 422 274	(S)	9 586	27 249	154 180	267 581	348 809	552 122	382 128	233 226	444 249
Net construction receipts† -----	2 362 527	(S)	8 675	26 573	151 704	262 752	344 996	537 325	371 435	226 135	429 899
Value added†† -----	1 297 853	(S)	4 137	13 692	79 917	136 490	190 721	295 081	202 108	126 034	248 078
Payments for materials, components, supplies, and fuels -----	1 252 744	(S)	4 993	13 606	79 567	142 577	186 417	291 361	211 389	115 899	205 330
Payments for construction work subcontracted to others -----	59 747	(S)	911	675	2 476	4 829	3 813	14 796	10 693	7 091	14 350
Rental payments for machinery, equipment, and structures -----	28 823	(S)	*44	144	1 865	3 611	4 919	7 778	3 822	2 800	3 823
Capital expenditures, other than land -----	28 084	(S)	170	504	2 449	4 286	5 384	6 050	3 908	3 384	1 923
End-of-year gross book value of depreciable assets -----	228 891	(S)	1 419	3 400	21 615	35 595	42 060	53 273	31 158	17 869	22 118
1977											
All employees** -----	26 125	(S)	391	1 423	4 236	5 006	5 389	5 586	1 427	12 340	(NA)
Total construction receipts -----	1 006 566	(S)	8 861	42 730	143 034	192 910	224 863	248 496	63 042	179 836	(NA)
Value added†† -----	570 736	(S)	4 516	21 587	78 176	106 357	129 259	142 795	38 983	147 603	(NA)
1982 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** -----	2	-	12	10	6	6	4	2	(W)	(W)	(W)
Net construction receipts† -----	1	-	12	9	6	5	5	2	(W)	(W)	(W)
Capital expenditures, other than land -----	4	-	32	34	18	16	10	5	(W)	(W)	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†Data for this size class include establishments with receipts of \$10,000,000 or more, which were not tabulated separately in 1977.

Table 7. Construction Receipts for Establishments With Payroll by Type of Construction: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Construction receipts			Relative standard error of estimate (percent) for column—		
	Total	New construction ¹	Maintenance and repair	A	B	C
	A	B	C			
1982						
Total construction receipts†	2 422 274	1 830 174	592 100	1	1	2
Building construction	2 149 580	1 632 239	517 340	1	1	2
Single-family houses	236 773	121 782	114 991	4	4	5
Single-family houses, detached	193 207	94 558	98 648	4	5	6
Single-family houses, attached	43 565	27 223	16 342	6	9	9
Apartment buildings with two or more apartments	96 784	61 349	35 435	5	5	8
Other residential buildings	112 414	87 003	25 410	3	4	6
Office and bank buildings	882 963	745 472	137 491	1	1	2
Office buildings	790 020	675 607	114 413	1	1	3
Bank buildings and other financial institutions	92 943	69 865	23 077	3	2	4
Industrial buildings and warehouses	240 396	193 181	47 214	2	2	3
Industrial buildings	184 208	144 001	40 206	2	2	4
Warehouses	56 187	49 180	7 007	3	2	5
Stores, restaurants, public garages, and automobile service stations	296 354	208 461	87 893	3	3	4
Religious buildings	43 261	28 535	14 725	4	4	6
Educational buildings	105 814	80 071	25 742	3	3	5
Hospitals and institutional buildings	95 833	75 894	19 938	2	2	3
Amusement, social, and recreational buildings	18 103	15 819	2 283	3	3	6
Other nonresidential buildings	20 885	14 672	6 218	7	10	5
Nonbuilding construction	31 063	21 402	9 661	6	4	18
Construction work, n.s.k.	241 630	176 532	65 098	4	5	5
1977						
Total construction receipts†	1 006 566	699 990	306 576	1	1	1
Building construction	919 964	635 280	284 684	1	1	1
Single-family houses	150 355	85 982	64 373	3	4	3
Apartment buildings with two or more apartments	64 396	40 781	23 615	6	9	4
Other residential buildings	45 199	28 946	16 253	2	2	4
Office and bank buildings	179 934	144 218	35 716	1	1	2
Industrial buildings and warehouses	137 424	104 610	32 814	2	2	4
Stores, restaurants, public garages, and automobile service stations	164 299	108 087	56 212	2	2	3
Religious buildings	31 393	19 582	11 811	5	4	8
Educational buildings	60 107	40 902	19 205	2	2	3
Hospitals and institutional buildings	59 674	45 533	14 141	1	1	2
Amusement, social, and recreational buildings	15 578	10 072	5 506	2	3	3
Other nonresidential buildings	11 607	6 568	5 039	7	7	7
Nonbuilding construction	3 593	2 405	1 188	15	17	12
Construction work, n.s.k.	83 055	62 315	20 740	4	4	4

¹For this industry, data for additions and alterations were not collected separately. These data are included with "New Construction."

Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1982

[Thousand dollars. Detail may not add to total due to rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or total receipts for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of construction receipts by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Number of establishments	All employees**	Payroll, all employees	Total construction receipts		Net construction receipts†	Value added††	Payments for construction work sub-contracted to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
All establishments -----	3 797	35 843	696 463	2 422 274	1 111 498	2 362 527	1 297 853	59 747	2	1	5
Establishments not specializing by type -----	1 427	16 179	329 118	1 068 192	(NA)	1 041 408	606 301	26 784	2	2	2
Establishments specializing 51 percent or more -----	2 369	19 664	367 345	1 354 082	1 111 498	1 321 119	691 552	32 963	2	1	9
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type -----	488	2 390	33 986	129 969	103 888	126 522	69 690	3 447	7	7	22
Establishments with—											
100 percent specialization -----	133	536	8 306	34 794	34 794	33 806	18 026	988	10	13	8
90 to 99 percent specialization -----	83	315	3 903	13 543	12 476	12 652	6 639	*890	22	22	62
80 to 89 percent specialization -----	38	232	3 193	12 632	10 319	12 379	6 275	253	27	24	31
70 to 79 percent specialization -----	117	662	8 635	35 180	26 096	34 084	18 123	*1 096	14	13	41
60 to 69 percent specialization -----	78	485	7 808	27 305	16 616	27 110	16 752	195	16	16	23
51 to 59 percent specialization -----	38	159	2 141	6 513	3 586	6 489	3 874	*24	28	31	59
APARTMENT BUILDINGS WITH TWO OR MORE APARTMENTS											
All establishments specializing in type -----	110	566	8 469	32 797	24 938	32 224	16 202	573	14	14	25
Establishments with—											
100 percent specialization -----	41	138	1 389	6 516	6 516	(D)	3 076	(D)	32	38	-
90 to 99 percent specialization -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
80 to 89 percent specialization -----	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	-	-	-
70 to 79 percent specialization -----	27	158	2 341	9 555	7 166	9 283	4 027	*271	28	33	52
60 to 69 percent specialization -----	29	220	3 511	13 190	8 181	12 925	6 478	265	20	17	17
51 to 59 percent specialization -----	-	-	-	-	-	-	-	-	-	-	-
INDUSTRIAL BUILDINGS											
All establishments specializing in type -----	96	878	17 691	59 460	44 721	53 731	25 678	5 729	6	5	11
Establishments with—											
100 percent specialization -----	47	219	4 632	17 003	17 003	13 337	4 067	3 666	14	13	17
90 to 99 percent specialization -----	*6	*40	829	*2 285	*2 122	(D)	1 159	(D)	56	44	-
80 to 89 percent specialization -----	*8	*13	*130	*727	*581	*628	*278	(S)	73	62	-
70 to 79 percent specialization -----	3	111	1 808	6 959	5 255	(D)	3 111	(D)	(W)	(W)	-
60 to 69 percent specialization -----	26	338	6 642	21 139	13 489	19 205	10 753	1 934	13	11	5
51 to 59 percent specialization -----	6	157	3 650	11 347	6 269	11 343	6 308	*4	11	8	71
OFFICE BUILDINGS											
All establishments specializing in type -----	253	7 156	169 316	663 341	521 673	648 260	325 051	15 081	1	1	18
Establishments with—											
100 percent specialization -----	64	1 523	36 591	155 452	155 452	154 875	71 783	577	3	1	5
90 to 99 percent specialization -----	23	693	16 320	56 964	53 971	56 025	32 023	939	2	2	(W)
80 to 89 percent specialization -----	41	1 050	25 447	83 923	67 913	83 157	45 064	766	5	4	1
70 to 79 percent specialization -----	68	2 142	45 074	185 878	135 140	177 936	86 592	7 942	4	4	33
60 to 69 percent specialization -----	33	1 180	31 218	119 587	75 390	117 570	60 111	2 017	2	1	(W)
51 to 59 percent specialization -----	23	567	14 666	61 536	33 805	58 696	29 477	2 840	6	4	(W)
STORES, RESTAURANTS, PUBLIC GARAGES, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type -----	300	2 419	37 452	133 385	105 917	131 843	75 342	1 542	7	7	13
Establishments with—											
100 percent specialization -----	70	594	10 482	41 451	41 451	40 762	21 427	689	12	11	21
90 to 99 percent specialization -----	37	199	2 459	11 454	10 465	11 418	5 715	36	28	26	8
80 to 89 percent specialization -----	44	255	4 529	17 727	14 621	17 589	8 875	138	18	25	40
70 to 79 percent specialization -----	40	398	5 783	15 522	11 238	15 490	9 675	32	24	18	14
60 to 69 percent specialization -----	95	602	8 872	33 236	20 453	32 810	18 267	425	17	13	24
51 to 59 percent specialization -----	12	370	5 326	13 995	7 687	13 773	11 381	221	12	10	12

Table 9. Quarterly Construction Worker Hours and Employment for Establishments With

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
				Construction workers ¹	Hours worked (thousands)	Construction workers ¹	Hours worked (thousands)
	A	B	C	D	E	F	G
United States	3 797	26 402	43 075	25 113	10 168	25 509	10 498
Alabama	66	267	244	231	51	262	61
Alaska	10	66	84	77	23	67	20
Arizona	57	310	609	311	150	299	146
Arkansas	36	122	234	134	63	119	56
California	574	3 243	5 148	3 133	1 268	3 209	1 295
Colorado	85	693	1 033	594	226	632	238
Connecticut	39	235	347	235	81	226	80
Delaware	*5	(S)	(S)	(S)	(S)	(S)	(S)
District of Columbia	*7	75	139	75	31	79	36
Florida	324	1 554	2 679	1 582	672	1 512	660
Georgia	76	549	933	539	236	524	225
Hawaii	22	213	349	229	95	213	89
Idaho	*15	*42	44	*33	*10	36	*9
Illinois	151	1 012	1 738	917	389	1 008	430
Indiana	58	345	426	324	97	332	103
Iowa	22	359	408	355	99	338	97
Kansas	34	203	380	194	88	196	94
Kentucky	34	209	350	225	87	214	94
Louisiana	68	549	845	538	196	558	219
Maine	15	33	61	28	*14	34	*16
Maryland	47	525	914	482	206	489	220
Massachusetts	75	733	1 294	712	308	717	322
Michigan	144	840	1 350	762	311	830	339
Minnesota	59	370	597	357	130	332	134
Mississippi	22	116	154	112	38	106	32
Missouri	47	493	802	388	160	404	171
Montana	*15	*38	*57	*33	*15	*33	(S)
Nebraska	16	72	125	63	25	65	28
Nevada	29	277	474	293	136	266	107
New Hampshire	20	(S)	(S)	(S)	(S)	(S)	(S)
New Jersey	133	965	1 421	919	331	949	346
New Mexico	21	74	114	79	31	70	*24
New York	277	1 797	2 627	1 641	606	1 684	635
North Carolina	78	658	1 294	640	296	646	317
North Dakota	8	58	105	59	26	58	26
Ohio	147	779	1 274	707	303	748	297
Oklahoma	44	343	496	335	119	321	125
Oregon	44	217	355	229	85	206	80
Pennsylvania	144	1 885	3 110	1 750	721	1 773	740
Rhode Island	*11	79	115	76	29	72	29
South Carolina	41	249	470	237	113	249	111
South Dakota	14	68	112	67	27	65	28
Tennessee	61	440	722	431	171	464	183
Texas	336	3 581	6 371	3 393	1 443	3 490	1 545
Utah	24	82	126	77	31	79	31
Vermont	9	32	*55	*29	*12	*29	*13
Virginia	49	458	687	439	160	453	176
Washington	102	443	684	414	157	418	175
West Virginia	*19	83	*121	91	*34	83	*30
Wisconsin	38	349	539	333	137	345	128
Wyoming	15	(S)	(S)	(S)	(S)	(S)	(S)

¹Sum of construction workers during pay periods including 12th of March, May, August, and November.

Payroll by State: 1982

July to September		October to December		Relative standard error of estimate (percent) for column—										Location of establishment
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
26 737	11 156	27 075	11 252	1	1	1	1	1	1	1	1	1	1	U.S.
275	64	279	67	20	16	21	27	19	24	21	25	19	23	Ala.
59	19	52	21	14	12	16	14	14	17	16	16	10	12	Alaska
286	146	346	166	13	13	13	16	14	16	13	16	12	13	Ariz.
116	*56	123	*57	30	33	30	37	30	39	32	41	31	40	Ark.
3 212	1 293	3 192	1 292	4	4	4	5	4	5	4	5	4	5	Calif.
727	275	803	294	9	9	10	12	10	12	9	10	8	10	Colo.
239	88	240	97	18	17	19	19	18	18	19	22	17	21	Conn.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	Del.
78	36	74	34	29	26	30	32	31	30	28	27	28	28	D.C.
1 527	681	1 524	665	7	7	7	9	7	9	7	8	7	9	Fla.
563	244	517	227	12	10	11	11	12	12	13	13	11	13	Ga.
218	89	180	75	7	7	8	11	8	9	7	9	7	7	Hawaii
*43	*11	*49	*13	43	38	42	65	39	66	42	57	46	58	Idaho
1 018	449	1 035	469	5	5	5	7	5	7	5	7	5	7	Ill.
361	112	352	112	10	8	10	12	9	12	10	11	9	11	Ind.
356	104	390	107	6	8	5	10	6	11	7	11	7	11	Iowa
200	96	205	100	15	19	14	23	15	22	16	22	14	20	Kans.
195	84	198	84	13	15	12	17	13	17	14	18	13	19	Ky.
500	211	584	218	10	11	10	14	10	13	10	13	10	13	La.
34	*16	33	*15	31	38	36	54	30	48	30	48	31	51	Maine
556	245	544	242	8	6	8	8	8	8	8	7	8	7	Md.
737	327	730	336	7	8	7	9	7	9	7	9	7	9	Mass.
862	342	830	356	8	8	8	9	8	10	8	10	8	9	Mich.
351	147	425	184	8	9	10	13	9	13	9	12	8	10	Minn.
119	37	126	46	20	13	19	17	20	21	22	19	18	15	Miss.
511	204	652	265	15	17	12	15	12	14	9	12	25	29	Mo.
*39	*14	*32	*15	52	59	58	71	58	-	61	74	49	71	Mont.
80	34	70	36	21	25	19	32	18	31	23	33	21	29	Nebr.
272	107	265	122	13	11	12	11	14	15	12	14	13	12	Nev.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	N.H.
1 022	373	948	369	7	9	8	11	8	11	7	10	7	10	N.J.
64	25	80	32	22	27	20	33	20	40	22	38	24	37	N. Mex.
1 810	658	2 011	727	7	6	8	8	7	8	7	8	6	7	N.Y.
658	338	667	341	9	9	9	11	9	10	9	10	10	11	N.C.
57	25	60	26	14	14	15	19	14	16	12	15	15	16	N. Dak.
789	326	835	346	7	7	8	10	7	10	7	9	7	9	Ohio
319	118	354	133	20	16	18	19	18	18	21	20	21	20	Okla.
200	89	225	99	17	13	21	18	18	17	14	16	15	16	Oreg.
2 039	834	1 923	813	3	3	3	4	3	4	3	4	3	4	Pa.
80	29	81	27	16	13	11	21	12	21	16	16	22	19	R.I.
255	122	245	123	16	17	16	20	16	20	17	20	16	20	S.C.
66	27	66	27	19	14	18	19	17	20	18	18	18	19	S. Dak.
439	195	422	172	11	11	12	13	14	14	11	12	10	14	Tenn.
3 712	1 764	3 670	1 618	4	3	4	4	4	4	3	3	4	4	Tex.
77	29	89	34	23	23	19	27	25	30	24	34	27	35	Utah
31	*14	35	*15	39	49	42	64	43	61	40	56	35	52	Vt.
465	186	449	163	7	9	7	12	7	10	7	9	7	11	Va.
455	176	422	174	9	10	10	14	9	12	8	13	10	14	Wash.
80	*28	77	*27	38	46	36	52	38	51	39	65	40	54	W. Va.
368	142	338	132	10	7	10	9	10	9	9	7	10	9	Wis.
(S)	(S)	(S)	(S)	-	-	-	-	-	-	-	-	-	-	Wyo.

Table 10. Construction Receipts for Establishments With Payroll by Location of Construction Work: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of construction work	1982					1977 construction receipts for work done in this State	Percent change 1982/ 1977 (col A ÷ F)	Relative standard error of estimate (percent) for column—		
	Construction receipts for work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State						
		Number	Construction receipts	Number	Construction receipts					
A	B	C	D	E	F	G	A	C	E	
United States -----	2 422 274	3 710	2 169 197	968	253 076	1 006 566	140.6	1	1	2
Alabama -----	24 328	63	21 305	*16	3 023	10 606	129.4	13	15	2
Alaska -----	4 351	10	(D)	1	(D)	3 131	39.0	10	-	-
Arizona -----	26 612	57	(D)	3	(D)	16 134	64.9	11	-	-
Arkansas -----	7 411	36	6 985	*6	*426	7 681	-3.5	23	25	74
California -----	388 207	572	(D)	17	(D)	153 557	152.8	4	-	-
Colorado -----	76 891	85	(D)	16	(D)	15 312	402.2	6	-	-
Connecticut -----	27 715	39	16 635	22	11 080	10 039	176.1	9	13	6
Delaware -----	12 891	*5	*1 716	28	11 175	1 645	683.6	11	58	9
District of Columbia -----	20 152	7	4 488	29	15 664	3 955	409.5	7	32	1
Florida -----	129 491	320	125 724	*11	3 766	48 039	169.6	6	7	1
Georgia -----	42 745	71	41 729	22	1 016	18 936	125.7	10	11	31
Hawaii -----	27 323	22	(D)	*2	(D)	6 225	338.9	5	-	-
Idaho -----	4 693	*15	*4 102	6	590	2 717	72.7	37	42	(W)
Illinois -----	123 202	151	105 396	49	17 806	56 111	119.6	4	4	8
Indiana -----	30 492	58	26 290	36	4 201	18 487	64.9	5	5	5
Iowa -----	22 567	22	20 150	14	2 416	13 397	68.4	8	7	26
Kansas -----	18 082	34	13 985	19	4 097	8 531	112.0	11	14	2
Kentucky -----	17 611	32	10 841	36	6 769	13 224	33.2	8	13	4
Louisiana -----	56 523	68	52 099	27	4 424	16 883	234.8	8	9	10
Maine -----	7 153	15	2 762	*8	*4 390	3 129	128.6	31	28	46
Maryland -----	30 066	46	26 843	21	3 223	14 857	102.4	8	9	10
Massachusetts -----	78 075	70	72 563	32	5 512	26 141	198.7	4	4	11
Michigan -----	70 819	142	68 080	10	2 739	40 135	76.5	6	7	(W)
Minnesota -----	43 363	53	41 718	6	1 645	12 252	253.9	5	5	6
Mississippi -----	10 753	22	7 699	23	*3 053	5 660	90.0	21	13	66
Missouri -----	37 505	42	34 227	16	3 278	10 227	266.7	5	5	31
Montana -----	5 287	*15	(D)	5	(D)	3 834	37.9	27	-	-
Nebraska -----	17 182	16	(D)	*6	(D)	6 486	164.9	8	-	-
Nevada -----	12 932	26	10 352	24	2 580	13 976	-7.5	15	17	30
New Hampshire -----	12 183	15	(D)	8	(D)	(D)	(D)	4	-	-
New Jersey -----	80 722	131	71 263	53	9 459	35 420	127.9	6	6	7
New Mexico -----	6 729	21	5 443	*13	*1 285	4 787	40.6	21	18	49
New York -----	131 483	265	126 322	65	5 161	68 848	91.0	7	7	14
North Carolina -----	48 951	75	43 550	26	5 400	20 856	134.7	9	10	1
North Dakota -----	5 436	7	(D)	2	(D)	(D)	(D)	14	-	-
Ohio -----	67 858	137	64 116	28	3 741	45 327	49.7	7	7	4
Oklahoma -----	31 105	39	(D)	*17	(D)	10 761	189.1	10	-	-
Oregon -----	29 603	44	25 974	8	3 629	13 510	119.1	8	9	12
Pennsylvania -----	73 015	144	69 140	34	3 875	38 576	89.3	6	6	22
Rhode Island -----	8 167	*11	7 222	7	945	4 201	94.4	5	6	5
South Carolina -----	26 434	40	19 200	37	7 233	8 737	202.6	12	13	39
South Dakota -----	1 778	10	1 747	*5	*31	4 361	-59.2	36	36	56
Tennessee -----	40 828	61	38 586	*20	2 241	22 563	81.0	11	12	13
Texas -----	353 474	332	336 560	19	16 914	96 774	265.3	2	2	2
Utah -----	4 422	24	(D)	*2	(D)	3 074	43.9	21	-	-
Vermont -----	*543	8	(D)	1	(D)	617	-12.0	55	-	-
Virginia -----	39 371	49	29 823	67	9 548	19 033	106.9	6	7	10
Washington -----	42 993	102	39 759	12	3 234	21 458	100.4	7	8	1
West Virginia -----	4 466	*19	*3 315	9	1 151	3 636	22.8	32	43	5
Wisconsin -----	31 975	37	31 534	14	441	19 497	64.0	7	7	14
Wyoming -----	*6 288	15	(D)	4	(D)	*1 654	280.2	42	-	-

Table 11. All Business Receipts for Establishments With Payroll by Kind of Business Activity: 1982 and 1977

[Thousand dollars. Detail may not add to total due to rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kinds of business activities	All business receipts		Relative standard error of estimate (percent)	
	1982	1977	1982	1977
All kinds of business.....	2 610 344	1 152 811	1	1
General building contractor	1 773	23 979	40	11
Acoustical contractor	*1 990	1 345	42	29
Air conditioning contractor	*1 031	3 354	43	6
Architectural steel contractor	(D)	2 020	-	1
Carpentry contractor	5 203	(NA)	6	(NA)
Glass and glazing contractor	2 259 850	955 248	1	1
Iron work contractor	(D)	5 827	-	1
Painting contractor	5 858	3 117	3	6
Residential remodeling contractor	5 110	(NA)	20	(NA)
Sheet metal contractor	6 410	3 513	9	9
Siding contractor	(D)	5 046	-	1
Manufacturing	5 526	3 057	8	(W)
Retail trade	66 469	52 577	4	3
Wholesale trade	63 278	60 624	3	1
Other activities	151 196	33 104	9	14

Table 12. Profile of Establishments With Payroll in This Industry: 1982 and Earlier Census Years

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	1982	1977	1972	Relative standard error of estimate (percent) for 1982
AVERAGE PER ESTABLISHMENT				
Number of employees** -----	9.4	8.0	8.1	2
Number of construction workers -----	7.0	5.9	5.8	2
Number of all other employees -----	2.5	2.0	2.3	2
Payroll, all employees ----- \$1,000 --	183.4	96.6	77.5	1
Construction worker wages ----- do --	129.7	69.7	54.3	1
Other employee salaries ----- do --	53.7	26.9	23.2	1
All business receipts ----- do --	687.5	351.2	267.3	1
Total construction receipts ----- do --	637.9	306.6	241.4	1
Payments for materials, components, supplies, and fuels ----- do --	329.9	173.7	125.1	1
Construction work subcontracted to others ----- do --	15.7	3.6	3.7	5
Capital expenditures, other than land ----- do --	7.4	5.1	3.9	4
Gross book value of depreciable assets ----- do --	60.3	34.7	27.9	2
AVERAGE PER EMPLOYEE				
Payroll, all employees ----- do --	19.4	12.1	9.5	1
All business receipts ----- do --	72.8	44.1	32.8	1
Value added†† ----- do --	36.2	21.9	17.0	1
AVERAGE PER CONSTRUCTION WORKER				
Construction worker wages ----- do --	18.7	11.8	9.4	1
Total construction receipts ----- do --	91.8	52.1	41.9	1
Construction worker hours ----- thousand --	1.6	(NA)	(NA)	1
AVERAGE PER OTHER EMPLOYEE				
Other employee salaries ----- \$1,000 --	21.6	13.6	10.2	1
AVERAGE PER DOLLAR OF TOTAL CONSTRUCTION RECEIPTS				
Payroll, all employees -----	.288	.315	.321	1
Payments for materials, components, supplies, and fuels -----	.517	.566	.518	1
Payments for construction work subcontracted to others -----	.025	.012	.015	5
Capital expenditures, other than land -----	.012	.017	.016	4
Rental payments for machinery, equipment, and structures -----	.012	.007	(NA)	2

Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1982

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker (thousands)	Total construction receipts per construction worker (\$1,000)	Average per dollar of total construction receipts				
					Payroll, all employees	Payments for materials, components, supplies, and fuels	Payments for construction work sub-contracted to others	Capital expenditures, other than land	Rental payments for machinery, equipment, and structures
United States	9.4	19.4	1.6	91.7	.288	.517	.025	.012	.012
Alabama	6.5	16.7	.9	97.8	.274	(D)	.013	.012	.010
Alaska	9.7	22.3	1.3	95.6	.343	.551	-	.016	.033
Arizona	7.8	15.0	2.0	80.4	.268	.572	.008	.010	.016
Arkansas	4.0	14.1	1.9	58.3	.288	.549	(D)	(D)	.008
California	7.7	22.1	1.6	115.2	.261	.491	.022	.010	.016
Colorado	10.8	18.4	1.5	91.7	.265	.537	*.010	.012	.011
Connecticut	7.8	16.5	1.5	71.2	.301	.578	.009	.022	.019
Delaware	(S)	(S)	(S)	(S)	(S)	(D)	(D)	(S)	(D)
District of Columbia	*12.6	22.3	1.9	77.9	.336	.347	(D)	.002	.005
Florida	6.7	15.5	1.7	83.9	.259	.543	.014	.011	.009
Georgia	9.7	17.1	1.7	84.4	.273	.524	.011	.026	.014
Hawaii	13.8	22.6	1.6	122.8	.261	.502	.027	.006	.014
Idaho	*3.9	*14.4	*1.0	*103.4	*.196	*.604	(D)	*.070	*.005
Illinois	9.4	23.4	1.7	110.4	.297	.510	.033	.010	.012
Indiana	8.3	18.8	1.2	80.7	.325	.481	.015	.009	.013
Iowa	23.1	13.5	1.1	58.6	.328	.553	(D)	.008	.002
Kansas	8.9	20.1	1.9	75.5	.397	.516	.005	.009	.008
Kentucky	9.3	18.2	1.7	71.2	.388	.638	.010	.015	.008
Louisiana	10.2	20.1	1.5	95.1	.266	.570	*.011	.008	.009
Maine	3.2	10.8	1.8	84.3	.186	.498	.013	.064	.007
Maryland	15.6	18.8	1.7	92.8	.283	.497	.026	.010	.009
Massachusetts	12.9	18.7	1.8	102.4	.241	.477	.035	.031	.012
Michigan	8.0	18.8	1.6	89.8	.285	.517	.030	.009	.013
Minnesota	9.1	22.9	1.6	116.5	.286	.558	.012	.009	.012
Mississippi	7.6	14.8	1.3	66.9	.321	.816	*.010	.001	.024
Missouri	14.4	21.3	1.6	82.8	.353	.491	.020	.009	.011
Montana	*3.6	*13.1	*1.5	*74.7	*.249	*.612	(D)	*.003	(D)
Nebraska	7.4	20.7	1.7	131.4	.259	.597	.006	.014	.009
Nevada	12.6	20.7	1.7	78.9	.347	.510	*.006	.007	.026
New Hampshire	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(D)
New Jersey	9.6	18.6	1.5	82.1	.298	.471	.042	.022	.006
New Mexico	5.1	16.3	1.5	73.6	.322	.623	.010	*.005	.016
New York	8.4	16.1	1.5	75.4	.277	.494	.043	.014	.012
North Carolina	13.1	14.2	2.0	72.5	.304	.625	.011	.017	.016
North Dakota	10.3	18.4	1.8	111.6	.233	.509	(D)	*.014	.022
Ohio	7.4	20.1	1.6	92.9	.300	.483	.030	.006	.013
Oklahoma	9.5	19.4	1.4	81.7	.291	.513	.005	.007	.017
Oregon	7.0	23.6	1.6	160.8	.210	.573	*.004	.004	.012
Pennsylvania	15.8	23.5	1.6	78.3	.362	.246	(D)	.012	.007
Rhode Island	*11.2	13.4	1.5	115.9	.179	.497	.025	*.002	-
South Carolina	9.3	15.7	1.9	86.2	.280	.681	*.037	.012	.005
South Dakota	7.9	18.4	1.6	95.6	.312	.689	-	*.009	.012
Tennessee	12.0	16.9	1.6	93.7	.299	.731	.016	.007	.010
Texas	13.5	21.3	1.8	96.0	.281	.576	.015	.010	.010
Utah	4.3	17.9	1.5	56.0	.406	.600	.007	.035	.026
Vermont	5.2	14.4	*1.7	74.9	.282	1.003	(D)	.010	.043
Virginia	13.5	17.0	1.5	80.7	.305	.620	.020	.010	.014
Washington	6.5	19.8	1.5	99.6	.299	.506	.005	.006	.011
West Virginia	*5.8	11.5	*1.5	45.4	.335	.462	-	-	.012
Wisconsin	14.4	23.8	1.5	100.6	.371	.547	(S)	.012	.011
Wyoming	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)

APPENDIX A.

Explanation of Terms

Construction—Is composed of three broad categories: (1) new construction, (2) additions and alterations, and (3) maintenance and repair. "New construction" includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators and escalators. "Additions and alterations" includes construction activity making structural changes to existing facilities. "Maintenance and repair" includes the restoration of existing buildings or other structures or their service facilities, including the replacement of integral parts. Repainting, repapering, reroofing, etc., are also included.

Construction includes:

- special trade contracting such as electrical work, painting, and carpentering on mobile structures (trailers, mobile homes, and ships).
- support activities by construction contractors on mineral properties, except the following: sinking mine shafts; tunneling and shoring mines; erection, repairing and dismantling of drilling rigs; and building well foundations.
- the physical development of land for purposes other than agriculture.
- demolition of existing structures.

Construction does not include:

- shipbuilding.
- manufacturing of other mobile structures.

Number of establishments in business during year—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

Number of establishments in business at end of year—Includes all full-year or part-year establishments that were in business at the end of 1982.

Proprietors and working partners—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners. The partnership factor was based on information received during a large-scale test conducted in prior years.

All employees—Comprised all full-time and part-time employees on the payrolls of construction establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid-sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are excluded.

Total employment is calculated for each establishment and is derived by summing the construction workers data reported for March, May, August, and November, dividing by 4 and adding to it the number of other employees reported for March.

This approach was designed to simplify the questionnaire format and the reporting requirements of respondents. The industry average of these four selected pay periods approximates very closely the average employment for the year that would be obtained by using pay periods in all 12 months for almost all of the construction industries.

Construction workers—Includes all workers up through the working supervisor level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment operators, and on-site record keepers and security guards. Supervisory employees above the working supervisor level are excluded from this category but are included in the "other employees" category.

Other employees—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working supervisor level.

Construction worker hours—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1982 and are published in the detailed statistics tables.

Payroll—Includes the gross earnings paid in the calendar year 1982 to all employees on the payroll of construction establishments. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

Payroll data were collected and tabulated for the employment categories described above and separately for the first quarter of 1982.

Payroll data for auxiliary establishments of multiestablishment companies are not included in these totals. Selected data for these types of establishments are found in the industry summary report and the 1982 Enterprise Statistics reports.

Employer costs for fringe benefits—Represents expenditures made by the employer during 1982 for legally required and voluntary fringe benefit programs for employees. These include employers' Social Security contributions, unemployment compensation, workers' compensation, State temporary disability payments, union negotiated benefits, life insurance premiums, pension plans, insurance premiums on hospital and medical plans, and welfare plans.

All business receipts—Includes all receipts from general contracting, special trade contracting or subcontracting, and land development and improvement work. It also includes all receipts from the sale of land (not recorded as fixed assets of the reporting establishments) and buildings built for sale. All other receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.) are also included.

Money obtained during the year in the form of construction loans is not treated as receipts, nor is money realized from the sale or other disposition of the establishment's fixed assets.

Also excluded are receipts from operations in foreign countries and nonoperating income such as interest and dividends.

All business receipts are broken down in the following detail:

Total construction receipts—Includes all receipts during 1982 for construction work performed by general contractors, special trades contractors or subcontractors, and for land development and improvement work. Included are receipts for maintenance and repair construction work, as well as for new construction and additions and alterations. Also included is the value of any construction work done by the reporting establishments for themselves.

Builders were instructed to include in this item their 1982 receipts from the sale of buildings and other structures built for sale, excluding from these receipts the value of the land (see "land receipts" below) but including the value of any improvements an establishment made to the land. Builders who traded a new home or other building for an existing one were to include the estimated value of the trade-in.

Also included in construction receipts were fees received as sponsors of joint ventures and fees received as agents for owners (for construction work).

Excluded were receipts for separately definable architectural and engineering work done by the reporting establishment for others and receipts from the rental of equipment to others (see "other business receipts" below).

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies for construction purposes were instructed to include as construction receipts both the receipts for the installation and the receipts for the value (selling price) of the items installed. (Receipts for the selling price of items sold but not installed were to be included in "other business receipts.")

Receipts for work subcontracted in from others—Covers receipts during 1982 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total construction receipts accounted for by such work, and the percentages reported were applied to the reported construction receipts to develop a value for this item.

Land receipts—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in construction receipts.)

Other business receipts—Includes business receipts not reported as construction receipts or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Net construction receipts—Derived for each establishment by subtracting the payments made for construction work subcontracted to others from the total construction receipts. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Value added—Derived for each establishment, value added is equal to all business receipts, less payments for construction work subcontracted to others and payments for materials, components, supplies, and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, value added is modified to be equal to all business receipts less land receipts; payments for construction work subcontracted to others; and payments for materials, components, supplies, and fuels. (For a further explanation, see "Duplication of Receipts" section in the Introduction.)

Selected payments—Represents the total of payments for materials, components, and supplies; payments for construction work subcontracted to others; and payments for selected power, fuels, and lubricants. Capital expenditures and rental payments for machinery, equipment, and structures are shown elsewhere.

Payments for materials, components, and supplies include:

- total payments made by the reporting establishments during 1982 for the purchase of all materials, components, and supplies, except fuels, used for construction. (Supplies include expendable tools charged to current accounts.)
- freight and other direct charges incurred by the reporting establishment in acquiring the materials, components, and supplies are also included, as are the value of materials, components, and supplies obtained from other establishments of the respondent's company. Payments represent the amount paid after discounts.
- payments for materials, components, and supplies used by the reporting establishments in the construction of new plants or equipment for themselves, which are chargeable to their fixed assets accounts, are included in this item as are payments for materials bought and resold to others.
- payments made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Payments for materials, components, and supplies include only payments for physical goods and represent the amount paid after discounts.

Excluded from this item are:

- services such as advertising, telephone, telegraph and cable, insurance, developmental and research services of engineering, management, marketing, and other professional consultants, unless their costs are included in the prices paid for materials.
- overhead items such as depreciation charges against plant and equipment, rent and rental allowances, interest payments, royalties, patent fees, payments for land, rental of construction machinery or equipment, and construction work let out to other construction contractors.
- materials furnished to contractors by the owners of projects.

Payments for construction work subcontracted to others include:

- all payments made during 1982 for construction work subcontracted out to other construction contractors. General contractors were instructed to include payments to subcontractors. Builders were instructed to include payments made to general contractors and also payments made directly to subcontractors.
- special trade contractors were instructed to include payments made to other subcontractors. The payments made by the reporting establishment for its purchases of materials, components, and supplies are not included here, even if they were provided to a subcontractor for his use. Such purchases are reported under a separate category, "payments for materials, components, and supplies." However, if payments to subcontractors covered materials purchased directly by the subcontractors, then the total of such payments (including material charges) should have been reported in this item.

Excluded from this item are:

- payments made for the rental of construction machinery or equipment.

Payments for selected power, fuels, and lubricants include:

- payments made for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the parent company.
- payments made for natural and manufactured gas, fuel oil, coal and coke products, etc.

Dollar amounts include freight and other direct charges.

Storage capacity for fuels—Data for storage capacity for fuels were collected from heavy construction contractors, other than building construction contractors. Data are published in the detailed statistics tables for the heavy construction industries, i.e., SIC 1611, SIC 1622, SIC 1623, and SIC 1629.

Rental payments for machinery, equipment, and structures—Includes all payments made during 1982 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It excludes payments for the rental of land. It also excludes payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized. Such payments are included in "capital expenditures." It also excludes payments made under agreements which, in effect, are true subcontract construction arrangements; such payments are included in payments for "construction work subcontracted to others."

Selected purchased services—Includes all payments made during 1982 for communication services purchased from other companies or from other establishments of the parent company. It also includes the cost of all repairs made to structures and equipment by outside firms, or from other establishments of the parent companies. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increases the value of property, or the cost of adapting it for another use.

Fixed assets and depreciation—Refers to the value of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on fixed assets and depreciation were collected separately for: (1) structures, additions, and related facilities; (2) machinery and equipment; and (3) the total of both.

Respondents were asked to report the gross book value-acquisition cost (original cost or other basis) at the beginning and at the end of 1982. They were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1982.

Capital expenditures—Refers to all costs actually incurred during 1982 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment. Included are payments made under agreements which, in effect, are conditional sales contracts and which, as a result, are capitalized.

Respondents were instructed not to include any expenditures actually made prior to, or after 1982. For example, if they began construction of a building for an establishment's own use before 1982 and did not complete it until after 1982, they were to report only those costs actually incurred during 1982.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

- **New structures and related facilities**—Includes the total expenditures during 1982 for new buildings and structures, major additions and alterations to buildings and structures, and other facilities for the reporting establishment's use (such as roads, docks, tracks, parking lots, and fences). It excludes expenditures for land.
- **New machinery and equipment**—Includes expenditures for new machinery and new equipment. This item also includes capitalized repairs and improvements to used machinery and equipment.
- **New automobiles and trucks intended primarily for highway use**—Includes expenditures for new automobiles and trucks and capitalized repairs and improvements to used automobiles and trucks.
- **Used structures and related facilities**—Covers expenditures for used structures and related facilities acquired from others.
- **Used machinery and equipment**—Includes expenditures for used machinery and equipment acquired from others, including automobiles and trucks. Capitalized repairs and improvements to such equipment are reported as new machinery and equipment.

Value of inventories—Includes all of the materials and supplies that are owned and located within the United States. Excludes materials which are owned by others, but held by the reporting establishment.

Inventories of multiestablishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

Establishments building structures on their own land for sale (operative builders) were instructed to include the value of materials on hand at the end of the year but not to include the structures not yet sold or under construction.

Land subdividers and developers were instructed to include the value of materials on hand at the end of the year, but not include land not yet sold or under construction.

Ownership of construction projects—This item shows the distribution of construction receipts by ownership of the project—Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken and not to the financing. Government owned projects cover those owned by the Federal, Commonwealth, or local governments including public authorities and special districts.

Types of construction—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1982. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. However, complex projects consisting of two or more types of buildings, structures, or other facilities are difficult to classify because sufficient information is seldom available. Therefore, respondents were told to classify complex projects by the major function of the total complex.

In addition, heavy construction contractors and special trade contractors were requested to report the percentage of construction receipts derived from new construction work, including additions and alterations, and from maintenance and repair work for each of these types. General building contractors were requested to report the percentage of construction receipts derived from new construction work, from additions and alterations, and from maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of new construction, additions and alterations, and maintenance and repair.

Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (includes townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken party or lot line wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures other than containing two or more housing units.
- **Other residential buildings**—Includes hotels, motels, dormitories, and other nonhousekeeping residential structures.
- **Bank buildings and other financial institutions**—Includes all buildings which are used primarily to house banks or other financial institutions.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, miniwarehouses, and other storage buildings.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Note that heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are NOT included in this category, but are shown under nonbuilding construction.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices.
- **Other commercial buildings such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, complete shopping centers, department stores, drug stores, restaurants, public garages, and auto service stations.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.

- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social, and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes buildings which are not classified elsewhere, such as fire stations, bus and air passenger terminals, hangars, etc.

Nonbuilding construction:

- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Elevated highways**—Includes roads, highways, and causeways built on structural supports.
- **Bridges**—Includes viaducts, trestles, and overpasses.
- **Tunnels**—Includes highway, pedestrian, and railway tunnels, etc.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.

- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, dikes, and levees.
- **Power and communication transmission lines, towers, and related facilities**—Includes telephone and telegraph lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.
- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.

Location of construction work—This item includes data for each State in which respondents engaged in construction work and the extent (percent of construction receipts) of that work.

APPENDIX B. Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173	Electrical Work Special Trade Contractors
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family Houses	174	Masonry, Stonework, Tile Setting, and Plastering Special Trade Contractors
153	Operative Builders	1741	Masonry, Stone Setting, and Other Stonework Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical and Insulation Work Special Trade Contractors
154	General Building Contractors—Nonresidential Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	175	Carpentering and Flooring Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentering Special Trade Contractors
16	CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—GENERAL CONTRACTORS	1752	Floor Laying and Other Floorwork Special Trade Contractors, N.E.C.
161	Highway and Street Construction, Except Elevated Highways	176	Roofing and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors	1761	Roofing and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipe Line, Communication and Power Line Construction Contractors	178	Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, N.E.C.	1781	Water Well Drilling Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	179	Miscellaneous Special Trade Contractors
171	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating (Except Electric), and Air Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
172	Painting, Paper Hanging, and Decorating Special Trade Contractors	1794	Excavating and Foundation Work Special Trade Contractors
1721	Painting, Paper Hanging, and Decorating Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment Special Trade Contractors, N.E.C.
		1799	Special Trade Contractors, N.E.C.
		6552	SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES

APPENDIX C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

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1982 CENSUS OF CONSTRUCTION INDUSTRIES

Publications of the 1982 Census of Construction Industries, containing data on construction establishments in the United States, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

Preliminary Reports

Preliminary data from the 1982 census have been issued in 27 industry reports and 1 summary report. These reports are superseded by more detailed final reports.

Final Reports

Final detailed statistics are issued in separate paperbound reports.

Industry series—28 reports (CC82-I-1 to -28)

Industry series—27 reports (CC82-I-1 to -27). These reports present data for establishments with payroll and are published for each of the 27 industries included in the census. Each industry report presents 1982 data by State and for the United States on number of construction establishments; receipts; employment; hours worked; payrolls; payments to subcontractors; payments for materials, components, and supplies; payments for power and fuels; payments for selected purchased services; payments for the rental of machinery, equipment, and structures; value added; capital expenditures during the year; and depreciable assets. Limited data for 1977, 1972, and 1967 are also shown. In addition, more detailed data are shown at the U.S. level on construction receipts by type of structure (single-family houses, streets, roads, etc.). Selected data also are provided for establishments classified by their employment size and receipts size.

U.S. Summary—1 report (CC82-I-28). This report summarizes the data for establishments with payroll presented in the 27 individual industry reports and presents limited data for establishments with no payroll.

Geographic area series—10 reports (CC82-A-1 to -10)

Division reports (CC82-A-1 to -9). These reports are published for States grouped according to the nine census geographic divisions. Much of the geographic area series data are the same as presented in the

industry series, except here they are organized by State rather than by industry. Similar data also are presented for selected SMSA's. Data are provided for establishments classified by their employment size and receipts size. Data for establishments with no payroll as well as comparative 1977, 1972, and 1967 figures, on a limited basis, also are shown.

U.S. Summary by State (CC82-A-10). This report summarizes the data, as presented in the nine individual geographic division reports, for establishments with and without payroll.

Special series—1 report (CC82-SP-1)

Legal form of organization and type of operation (CC82-SP-1)—This report presents limited data (number of establishments, number of proprietors and working partners, total employment, and total receipts) for construction establishments without payroll, for construction establishments with payroll, and for the aggregate, classified by industry and by legal form of organization. It also contains selected statistics (number of establishments, employment, payrolls, receipts, payments to subcontractors, net construction receipts, and value added) for construction establishments with payroll, classified by industry and by type of operation (multiunit or single-unit) and by legal form of organization.

Final Report Volume

Final paperbound reports subsequently are assembled and reissued in one clothbound volume.

Microfiche

All published data also are available on microfiche.

OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, manufactures, enterprise statistics, minority-owned businesses, women-owned businesses, and transportation also are issued as part of the 1982 Economic Censuses. A separate series of reports covers the censuses of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Northern Mariana Islands. All published reports and microfiche are sold by the Superintendent of Documents, U.S. Government Printing Office. Appropriate announcements and order forms describing these products are available free of charge from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, D.C. 20233.

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